



# XINLI ABRASIVES

Zhengzhou Xinli Wear-Resistant Material Co., Ltd.

20+Years Manufacturer and Supplier

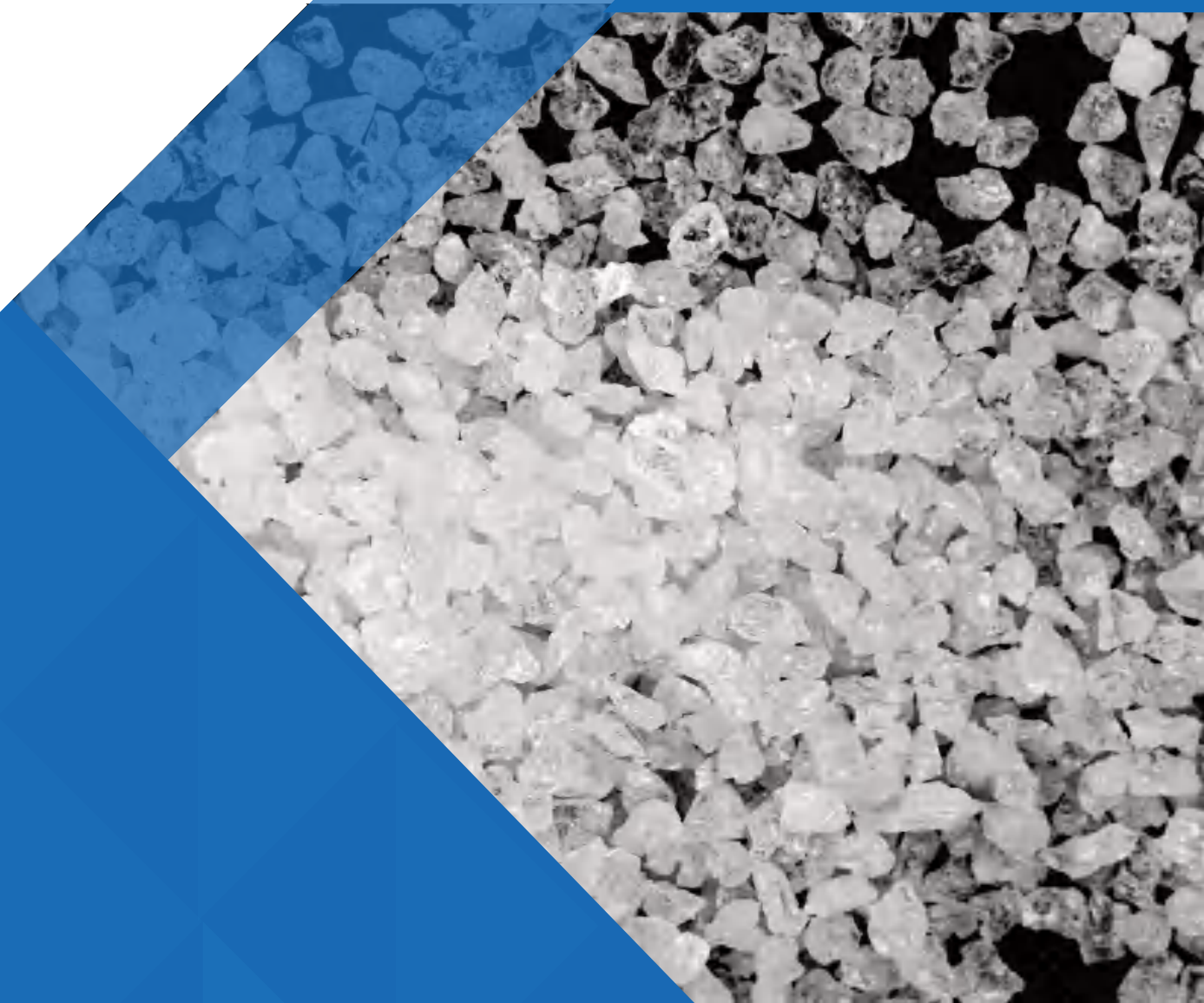
Xinli Abrasives is a professional factory that engaged in various abrasive materials production, R&D and sales.



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# COMPANY PROFILE

Zhengzhou Xinli Wear-Resistant Material Co., Ltd., established in 1996, is a professional integrative enterprise specializing in R&D, producing and selling various wear-resistant materials, such as white fused alumina, brown fused alumina, alumina powder, silicon carbide, zirconium oxide, diamond powder and other wear-resistant materials. They're widely used in semiconductors, refractory materials, ceramic materials, electronic chemicals, grinding and polishing, precision casting, building materials, petroleum, aerospace, military and other manufacturing fields.



The company has passed ISO9001:2015 quality management system, ISO14001:2015 environmental management system, ISO45001:2008 occupational health and safety management system certification.

At present, our company has exported to South Korea, Japan, Vietnam, Thailand, the United States, Chile, Mexico etc, and has won unanimous praise from customers.



## COMPANY ADVANTAGE

Adhere to innovation, standardized and refined production, helping every customer use the quality-stable and preferential price products is the goal which keeps Xinli Abrasives moving forward.



### CUSTOMIZATION

The particle size distribution within the required normal standard range can be adjusted according to the customer's needs within 10-15 days.



### ENVIRONMENT FRIENDLY

Minimize the impact of yellow and orange weather warning on production.



### QUALITY CONTROL

With our own smelting furnace, the quality of raw materials can be controlled from the source.





## WHITE FUSED ALUMINA GRIT





White fused alumina is obtained by high-purity low-sodium alumina powder after high-temperature melting, cooling, crystallization, and crushing. It is a particle with tightly controlled particle size distribution and consistent appearance.

Performance: White, with more than 99%  $\alpha$ -type crystals, high purity, high hardness, high toughness, strong cutting force, good chemical stability and good insulation.

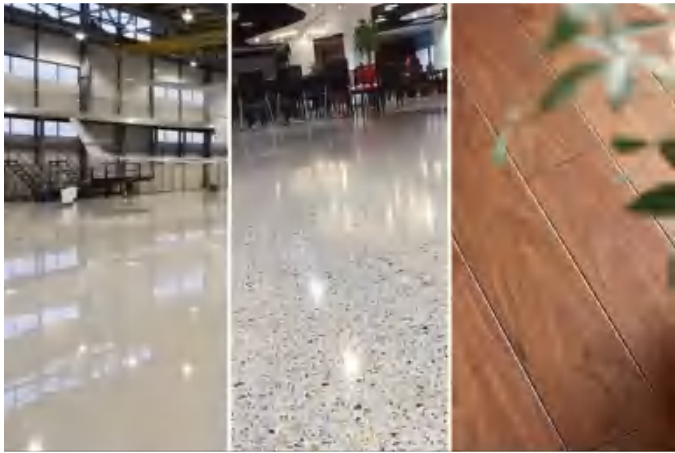
### PHYSICAL PROPERTIES

Appearance: White granular  
Crystal Form:  $\alpha$ -  $\text{Al}_2\text{O}_3$   
Mohs Hardness: 9.0  
Bulk Density: 1.5-2.0g/cm<sup>3</sup>  
Specific Gravity: 3.95g/cm<sup>3</sup>  
Melting Degree: 2250°C  
Refractory Degree: 2000°C  
 $\text{Al}_2\text{O}_3$  CAS No.: 1344-28-1  
HS Code: 2818109000

### ADVANTAGES

-  Does not affect the color of the workpiece
-  It can be used for sandblasting in the process where iron powder residue is strictly prohibited
-  Shaping grade particles are ideal for wet blasting and polishing abrasives
-  High  $\text{Al}_2\text{O}_3$  purity with low  $\text{Na}_2\text{O}$  and low  $\text{SiO}_2$

Chemical Composition(%)				
Model	Particle Size		$\text{Al}_2\text{O}_3$	$\text{Na}_2\text{O}$
WA	F4-F80	P12-P80	$\geq 99.20$	$\leq 0.30$
	F90-F150	P100-P150	$\geq 99.20$	$\leq 0.35$
	F180-F220	P180-P220	$\geq 98.70$	$\leq 0.40$



### APPLICATION

- Sandblasting and polishing operations.
- Atomized aesthetic processing of glass or acrylic artwork.
- Sandblasting during TV screen manufacturing.
- Cutting of silicon wafers.
- Cleaning and sandblasting of gear .
- Molding sand for precision casting.
- Additives for advanced refractories and other ceramics.
- Advanced grinding and polishing.



## WHITE FUSED ALUMINA POWDER

### PHYSICAL PROPERTIES

Appearance: White Powder  
True Density: 3.90g/cm<sup>3</sup>  
Mohs Hardness: 9.0  
Melting Point: 2250°C  
Al<sub>2</sub>O<sub>3</sub> CAS No.: 1344-28-1  
HS Code: 2818109000

### APPLICATION

- Sandblasting, polishing and grinding of metal and glass.
- Filling of the paint, wear-resistant coating, ceramic and glaze.
- Making oil stone, grinding stone, grinding wheel, sandpaper and emery cloth.
- Production of ceramic filter membranes, ceramic tubes, ceramic plates.
- Production of polishing solid wax and liquid wax.
- For the use of wear-resistant floor.
- Advanced grinding and polishing of piezoelectric crystals, semiconductors, stainless steel, aluminum and other metals and non-metals.



Chemical Composition(%)				
Model	Particle Size		Al <sub>2</sub> O <sub>3</sub>	Na <sub>2</sub> O
WA	F230-F800 (#240-#1500)	P240-P1500	≥98.50	≤0.50
	F1000-F1200 (#2000-#2500)	P2000-P2500	≥98.30	≤0.60
	#3000-#8000	—	≥97.60	≤0.80
	#10000-#20000	—	≥97.40	≤0.90
Particle Distribution(μm)				
Particle Size	D0	D3	D50	D94
#240	≤127	≤103	58.6±3.0	≥40.0
#280	≤112	≤87.0	49.4±3.0	≥33.0
#320	≤98.0	≤74.0	41.1±2.5	≥27.0
#360	≤86.0	≤66.0	36.1±2.0	≥23.0
#400	≤75.0	≤58.0	30.9±2.0	≥20.0
#500	≤63.0	≤50.0	26.4±2.0	≥16.0
#600	≤53.0	≤43.0	21.1±1.5	≥13.0
#700	≤45.0	≤37.0	17.9±1.3	≥11.0
#800	≤38.0	≤31.0	14.7±1.0	≥9.00
#1000	≤32.0	≤27.0	11.9±1.0	≥7.00
#1200	≤27.0	≤23.0	9.90±0.80	≥5.50
#1500	≤23.0	≤20.0	8.40±0.60	≥4.50
#2000	≤19.0	≤17.0	6.90±0.60	≥4.00
#2500	≤16.0	≤14.0	5.60±0.50	≥3.00
#3000	≤13.0	≤11.0	4.00±0.50	≥2.00
#4000	≤11.0	≤8.00	3.00±0.40	≥1.30
#6000	≤8.00	≤5.00	2.00±0.40	≥0.80
#8000	≤6.00	≤3.50	1.20±0.30	≥0.60
#10000	—	—	0.50-0.70	—
#20000	—	—	0.40-0.50	—





BROWN FUSED ALUMINA GRIT



Brown fused alumina takes the high quality bauxite as the raw material, mixing with iron powder and anthracite, produced by melting in the electric arc furnace at a high temperature over 2000°C.

Main chemical compositions are Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, and small amount of SiO<sub>2</sub> and Fe<sub>2</sub>O<sub>3</sub> etc. Toughness is higher than SiC. It has features of good crystallization, high hardness, low linear expansion coefficient and corrosion resistance.

PHYSICAL PROPERTIES

Appearance: Brown granular  
Crystal: Trigonal crystal  
Bulk density: 1.95 g/cm<sup>3</sup>  
True density: ≥ 3.9 g/cm<sup>3</sup>  
Mohs Hardness: 9.0  
Melting point: 2250 °C  
Refractory degree: 1900°C  
Molecular formula: Al<sub>2</sub>O<sub>3</sub>  
Al<sub>2</sub>O<sub>3</sub> CAS No.: 1344-28-1  
HS Code: 2818101000

ADVANTAGES

-  High purity, good crystallization, strong fluidity
-  Small crystal size, impact resistance
-  Shaping grade particles are ideal for wet blasting and polishing abrasives
-  Can be processed according to user requirements

Chemical Composition(%)							
Model	Particle Size		Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>
A	F4-F24	P12-P24	≥95.50	≤3.40	≤0.42	≤1.00	≤0.25
	F30-F80	P30-P80	≥95.00	≤3.40	≤0.42	≤1.00	≤0.25
	F90-F150	P100-P150	≥94.50	≤3.40	≤0.42	≤1.00	≤0.25
	F180-F220	P180-P220	≥94.00	≤3.60	≤0.45	≤1.00	≤0.25



APPLICATION

- F-grit for bonded abrasives such as resin bonded grinding wheels, vitrified grinding wheels.
- P-grit for coated abrasives such as sandpaper, sanding belts.
- Blasting media, metal preparation.
- Laminates, coatings, lapping, polishing.
- Anti-slip applications like floor, ceramics, auto brake parts.
- Manufacturing advanced refractory materials, castables, refractory bricks, etc.



**BROWN FUSED ALUMINA POWDER**

**PHYSICAL PROPERTIES**

Appearance: Brown powder  
Bulk density: 1.95 g/cm<sup>3</sup>  
True density: ≥ 3.9 g/cm<sup>3</sup>  
Mohs Hardness: 9.0  
Melting point: 2250 °C  
Refractory degree: 1900°C  
Al<sub>2</sub>O<sub>3</sub> CAS No.: 1344-28-1  
HS Code: 2818101000

**APPLICATION**

- Surface treatment process, sandblasting, grinding, polishing, etc.
- Manufacture of abrasive tools, such as grinding wheels, abrasive belts, sandpaper, etc.
- Additives to ceramic materials to improve hardness, wear resistance and impact resistance.
- Manufacture of components for precision instruments.
- Preparation of catalysts to improve catalyst activity and stability.
- Prepare protective materials.
- Preparation of semiconductor materials.



Chemical Composition(%)							
Model	Particle Size		Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>
A	F230-F800 #240-#1500	P240-P1500	≥93.50	≤3.80	≤0.45	≤1.20	≤0.25
	F1000-F1200 #2000-#2500	P2000-P2500	≥93.00	≤4.00	≤0.50	≤1.40	≤0.25
	#3000-#4000	—	≥92.50	≤4.50	≤0.55	≤1.60	≤0.25
Particle Distribution(μm)							
Particle Size	D0	D3	D50	D94			
#240	≤127	≤103	58.6±3.0	≥40.0			
#280	≤112	≤87.0	49.4±3.0	≥33.0			
#320	≤98.0	≤74.0	41.1±2.5	≥27.0			
#360	≤86.0	≤66.0	36.1±2.0	≥23.0			
#400	≤75.0	≤58.0	30.9±2.0	≥20.0			
#500	≤63.0	≤50.0	26.4±2.0	≥16.0			
#600	≤53.0	≤43.0	21.1±1.5	≥13.0			
#700	≤45.0	≤37.0	17.9±1.3	≥11.0			
#800	≤38.0	≤31.0	14.7±1.0	≥9.00			
#1000	≤32.0	≤27.0	11.9±1.0	≥7.00			
#1200	≤27.0	≤23.0	9.90±0.80	≥5.50			
#1500	≤23.0	≤20.0	8.40±0.60	≥4.50			
#2000	≤19.0	≤17.0	6.90±0.60	≥4.00			
#2500	≤16.0	≤14.0	5.60±0.50	≥3.00			
#3000	≤13.0	≤11.0	4.00±0.50	≥2.00			
#4000	≤11.0	≤8.00	3.00±0.40	≥1.30			





GREEN SILICON CARBIDE GRIT

Green silicon carbide takes petroleum coke and high-quality silica as the main raw materials, adding salt as an additive, and is smelted through a resistant furnace at high temperature.

Its hardness is between corundum and diamond, the mechanical strength is higher than corundum, brittle and sharp.

PHYSICAL PROPERTIES

Appearance: Green granular  
Mohs Hardness: 9.2  
Basic Mineral:  $\alpha$ -SiC  
True Density: 3.90 g/cm<sup>3</sup>  
Bulk Density: 1.2-1.6g/cm<sup>3</sup>  
Crystal: Hexagonal  
SiC CAS No.: 409-21-2  
HS Code: 2849200000

ADVANTAGES

-  High hardness and good wear resistance
-  Excellent chemical resistance
-  Has excellent thermal conductivity
-  Silicon carbide is one of the most widely used and economical one

Chemical Composition(%)					
Model	Particle Size		SiC	F.C.	Fe <sub>2</sub> O <sub>3</sub>
GC	F4-F90	P12-P100	≥99.20	≤0.15	≤0.15
	F100-F150	P120-P150	≥98.80	≤0.20	≤0.20
	F180-F220	P180-P220	≥98.40	≤0.20	≤0.20



APPLICATION

- Blasting, surface treatment for glass, ceramic, etc.
- Ceramic products.
- Raw material of GC grinding wheel, sandpaper, abrasive cloth suitable for marble and granite.
- Grinding hard alloy ,non-ferrous metal, plastic, etc.
- Raw material of whetstone, oilstone, grinding stone, abrasive stones and so on.



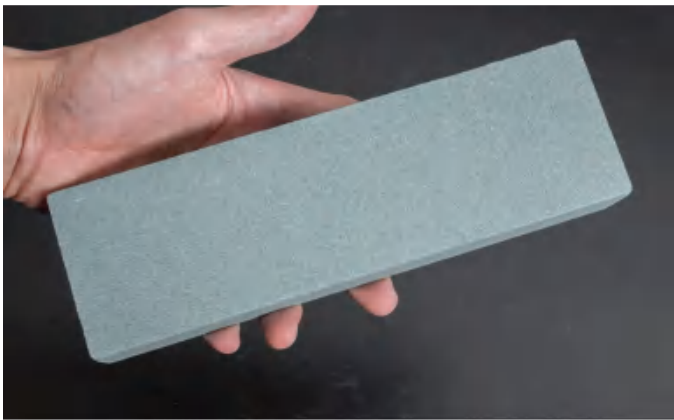
GREEN SILICON CARBIDE POWDER

PHYSICAL PROPERTIES

Appearance: Green powder  
Mohs Hardness: 9.2  
Basic Mineral: α-SiC  
True Density: 3.90 g/cm<sup>3</sup>  
Bulk Density: 1.2-1.6g/cm<sup>3</sup>  
Crystal: Hexagonal  
SiC CAS No.: 409-21-2  
HS Code: 2849200000

APPLICATION

- Cutting and grinding of solar silicon wafers, semiconductor silicon wafers, and quartz chips.
- Polishing crystal, solid grain iron.
- Precision polishing and sandblasting of ceramics and special steel.
- Consolidated and coated abrasives.
- Grinding non-metallic materials such as glass, stone, agate and high-end jewelry and jade.
- Manufacture advanced refractory materials, engineering ceramics, heating elements and thermal energy elements, etc.



Chemical Composition(%)					
Model	Particle Size		SiC	F.C.	Fe <sub>2</sub> O <sub>3</sub>
GC	F230-F280 (#240-#360)	P240-P360	≥98.40	≤0.20	≤0.25
	F320-F500 (#400-#800)	P400-P1000	≥98.20	≤0.20	≤0.30
	F600-F800 (#1000-#1500)	P1200-P1500	≥98.00	≤0.20	≤0.30
	F1000-F1200 (#2000-#2500)	P2000-P2500	≥ 97.60	≤0.20	≤0.30
	#3000-#8000	—	≥96.50	≤0.20	≤0.30
	#10000-#20000	—	≥96.00	≤0.20	≤0.30
Particle Distribution(μm)					
Particle Size		D0	D3	D50	D94
#240		≤127	≤103	58.6±3.0	≥40.0
#280		≤112	≤87.0	49.4±3.0	≥33.0
#320		≤98.0	≤74.0	41.1±2.5	≥27.0
#360		≤86.0	≤66.0	36.1±2.0	≥23.0
#400		≤75.0	≤58.0	30.9±2.0	≥20.0
#500		≤63.0	≤50.0	26.4±2.0	≥16.0
#600		≤53.0	≤43.0	21.1±1.5	≥13.0
#700		≤45.0	≤37.0	17.9±1.3	≥11.0
#800		≤38.0	≤31.0	14.7±1.0	≥9.00
#1000		≤32.0	≤27.0	11.9±1.0	≥7.00
#1200		≤27.0	≤23.0	9.90±0.80	≥5.50
#1500		≤23.0	≤20.0	8.40±0.60	≥4.50
#2000		≤19.0	≤17.0	6.90±0.60	≥4.00
#2500		≤16.0	≤14.0	5.60±0.50	≥3.00
#3000		≤13.0	≤11.0	4.00±0.50	≥2.00
#4000		≤11.0	≤8.00	3.00±0.40	≥1.30
#6000		≤8.00	≤5.00	2.00±0.40	≥0.80
#8000		≤6.00	≤3.50	1.20±0.30	≥0.60
#10000		—	—	0.51-0.70	—
#20000		—	—	0.50	—





BLACK SILICON CARBIDE GRIT

Black Silicon Carbide, also known as Black SiC, is primarily composed of silicon and carbon. It is produced through the high-temperature fusion of quartz sand and petroleum coke in an electric resistance furnace.

The powder typically consists of small, sharp-edged particles with a crystalline structure. Black silicon carbide is renowned for its high hardness. This property makes it an excellent abrasive material, which is suitable for applications requiring effective material removal.

PHYSICAL PROPERTIES

Appearance: Black granular  
Mohs Hardness: 9.2  
Bulk Density: 1.45-1.56g/cm<sup>3</sup>  
True Density: 3.12 g/cm<sup>3</sup>  
Melting Point: 2250°C  
Crystal: Hexagonal  
SiC CAS No.: 409-21-2  
HS Code: 2849200000

ADVANTAGES

-  Corrosion resistance, high strength, high hardness
-  Good wear-resisting performance, resist to shock
-  It is a cost-effective substitute for ferrosilicon
-  It has no dust nuisance while feeding the material

Chemical Composition(%)					
Model	Particle Size		SiC	F.C.	Fe <sub>2</sub> O <sub>3</sub>
C	F4-F90	P12-P100	≥98.80	≤0.15	≤0.15
	F100-F150	P120-P150	≥98.50	≤0.20	≤0.20
	F180-F220	P180-P220	≥98.30	≤0.25	≤0.25



APPLICATION

- Production of vitrified grinding wheel and resinoid grinding wheel, other bonded abrasive tools and coated abrasive tools.
- Casting sand, foundry sand, welding material.
- Wear proof flooring, abrasion resistant laminate flooring.
- Sand blasting, polishing and etching on metal and non-metal surfaces.
- Grinding and polishing of other metal and non-metal parts.



**BLACK SILICON CARBIDE POWDER**

**PHYSICAL PROPERTIES**

Appearance: Black powder  
Mohs Hardness: 9.2  
Bulk Density: 1.45-1.56g/cm<sup>3</sup>  
True Density: 3.12 g/cm<sup>3</sup>  
Melting Point: 2250°C  
Crystal: Hexagonal  
SiC CAS No.: 409-21-2  
HS Code: 2849200000

**APPLICATION**

- Ceramic, metal lapping, and polishing applications.
- SiC Sandpaper, grinding wheels, cut off tools, ceramic disc brakes.
- Bonded abrasive tool applications.
- Rock tumbling industries - Lapidary use, vibratory machines.
- Slicing of silicon carbide wafers.
- Finishing tough and hard materials.
- Slicing, lapping, and polishing glass and germanium wafers.
- Lapping of piston rings and gears.
- Grinding of nonferrous materials.
- Rock and stone polishing and engraving.
- Glass etching and glass carving industries.



Chemical Composition(%)					
Model	Particle Size		SiC	F.C.	Fe <sub>2</sub> O <sub>3</sub>
C	F230-F280 (#240-#360)	P240-P360	≥98.30	≤0.25	≤0.25
	F320-F500 (#400-#800)	P400-P1000	≥98.10	≤0.25	≤0.30
	F600-F800 (#1000-#1500)	P1200-P1500	≥97.80	≤0.25	≤0.30
	F1000-F1200 (#2000-#2500)	P2000-P2500	≥97.50	≤0.25	≤0.30
	#3000-#6000	—	≥96.00	≤0.25	≤0.30
Particle Distribution(μm)					
Particle Size		D0	D3	D50	D94
#240		≤127	≤103	58.6±3.0	≥40.0
#280		≤112	≤87.0	49.4±3.0	≥33.0
#320		≤98.0	≤74.0	41.1±2.5	≥27.0
#360		≤86.0	≤66.0	36.1±2.0	≥23.0
#400		≤75.0	≤58.0	30.9±2.0	≥20.0
#500		≤63.0	≤50.0	26.4±2.0	≥16.0
#600		≤53.0	≤43.0	21.1±1.5	≥13.0
#700		≤45.0	≤37.0	17.9±1.3	≥11.0
#800		≤38.0	≤31.0	14.7±1.0	≥9.00
#1000		≤32.0	≤27.0	11.9±1.0	≥7.00
#1200		≤27.0	≤23.0	9.90±0.80	≥5.50
#1500		≤23.0	≤20.0	8.40±0.60	≥4.50
#2000		≤19.0	≤17.0	6.90±0.60	≥4.00
#2500		≤16.0	≤14.0	5.60±0.50	≥3.00
#3000		≤13.0	≤11.0	4.00±0.50	≥2.00
#4000		≤11.0	≤8.00	3.00±0.40	≥1.30
#6000		≤8.00	≤5.00	2.00±0.40	≥0.80



ALUMINA POWDER



The alumina powder for polishing and grinding produced by our company uses selected industrial-grade alumina powder as raw material, and is condensed and fired through a 90-meter tunnel kiln.

Model	Al <sub>2</sub> O <sub>3</sub>	Particle Distribution		Primary Crystal	α-Al <sub>2</sub> O <sub>3</sub> Conversion Rate	Application
	%	D50μm	D100μm	nm	%	
PFA-1-1	≥99.5	1.2-1.9	9	500	>80	5# small white wax
P22-121	≥99.6	1.1-1.5	≤13	150-201	70-85	Titanium alloy mirror medium /fine polishing
PLA-015	≥99.6	1.1-1.5	≤15	150-200	≥95	Polished sapphire
PA-1-5	≥99.5	1.5-1.7	≤15	300-600	>98	Stainless steel mirror polished
P13-012	≥99.6	1.0-1.2	≤6	250-400	>98	Aluminum alloy mirror polished
XLG-35	≥99.6	2.0-4.0	≤50	≤200	≥88	Paint, acrylic, plastic super mirror polishing
XLG-16H	≥99.6	1.5-2.8	≤15	150-200	≥90	
XLG-12T	≥99.6	1.1-1.5	≤15	150-200	40-50	Copper alloy polishing
XLG-30T	≥99	3.0-4.2	≤10	200-250	>80	Glass polishing
XLG-90	≥99	8-10	≤10	200-250	60-75	Jade polishing

PLATELET CALCINED ALUMINA

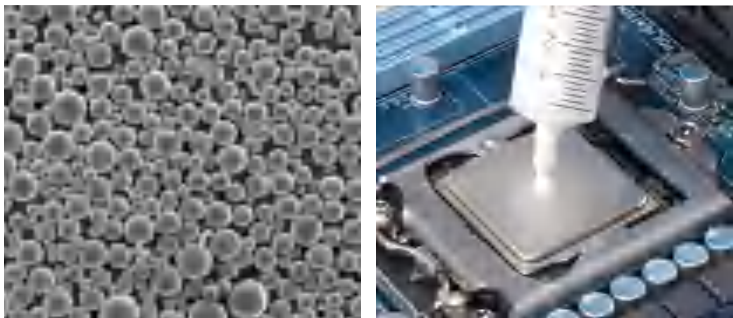


PWA is a high quality alumina type abrasive powder, consisting of a plate-shaped crystal of Al<sub>2</sub>O<sub>3</sub> with a purity of over 99.0%. It has excellent heat resistant properties as well as being chemically inert, and is not corroded by either acids or alkalines.

Chemical Composition(%)				
Size	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	Na <sub>2</sub> O
PWA3-PWA45	> 99.00	< 0.20	< 0.10	< 1.00

Particle Distribution(μm)				
Particle Size	D0	D3	D50	D94
45	< 82.9	53.4±3.2	34.9±2.3	22.8±1.8
40	< 77.8	41.8±2.8	29.7±2.0	19.0±1.0
35	< 64.0	37.6±2.2	25.5±1.7	16.0±1.0
30	< 50.8	30.2±2.1	20.8±1.5	14.5±1.1
25	< 40.3	26.3±1.9	17.4±1.3	10.4±0.8
20	< 32.0	22.5±1.6	14.2±1.1	9.00±0.80
15	< 25.4	16.0±1.2	10.2±0.8	6.30±0.50
12	< 20.2	12.8±1.0	8.20±0.60	4.90±0.40
9	< 16.0	9.70±0.80	6.40±0.50	3.60±0.30
5	< 12.7	7.20±0.60	4.70±0.40	2.80±0.25
3	< 10.1	5.20±0.40	3.10±0.30	1.80±0.30

SPHERICAL ALUMINA POWDER



Spherical Alumina Powder (Conventional Type) is produced by the high-temperature melting-sphere-jet method, and then sieving, purification, and other processes to produce the final object.

Model		XL-1	XL-2	XL-5	XL-10	XL-20	XL-30	XL-40	XL-70	XL-90	XL-120
Particle Distribution (μm)	D10	0.52	0.68	2.51	4.15	10.4	16.68	23.45	44.22	55.32	90.56
	D50	1.05	2.08	5.42	10.33	20.70	30.45	41.32	71.45	87.69	122.89
	D90	2.11	5.14	9.19	18.81	37.24	48.74	66.12	106.23	134.82	172.02
Specific Surface Area	m <sup>2</sup> /g	1.68	1.28	0.35	0.16	0.12	0.13	0.07	0.05	0.06	0.07
Electric Conductivity	μS/cm	6.07	5.30	5.61	4.06	6.78	7.59	4.56	6.17	8.15	2.6
pH Value	-	7.52	7.79	7.70	7.40	7.61	7.40	7.31	7.40	7.25	7.54
Moisture	%	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
True Density	g/cm <sup>3</sup>	3.71	3.70	3.73	3.76	3.79	3.79	3.80	3.87	3.88	3.89
Spheroidization Rate	%	97	98	98	98	98	97	96	97	95	96
Al <sub>2</sub> O <sub>3</sub>	%	99.83	99.94	99.93	99.94	99.94	99.93	99.94	99.92	99.94	99.94
SiO <sub>2</sub>	ppm	445	373	423	358	350	352	332	348	331	359
Fe <sub>2</sub> O <sub>3</sub>	ppm	152	120	175	135	145	160	148	157	165	135
Na <sub>2</sub> O	ppm	103	106	100	106	105	104	103	103	105	106



## ZIRCONIUM OXIDE

Zirconia oxide, also known as zirconium dioxide ( $ZrO_2$ ), is a versatile material used in various applications due to its unique properties. It is available in different forms such as powder, beads, and sand.



### ZIRCONIUM SILICATE BEAD

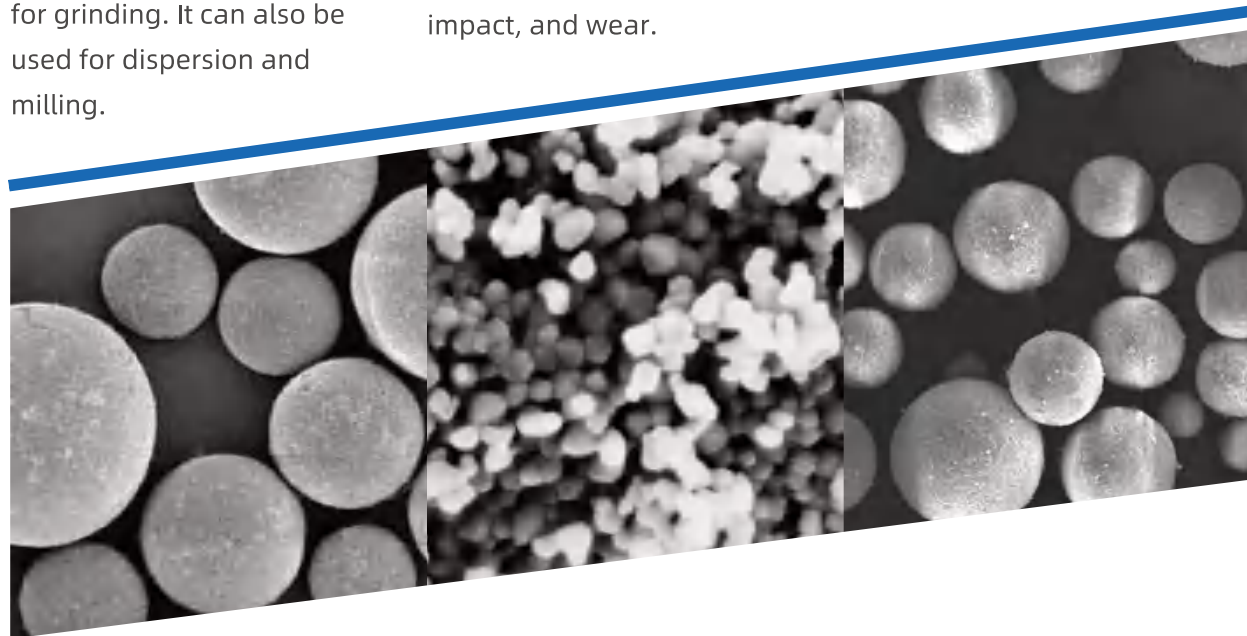
Zirconium silicate bead is one of the best choices of media for grinding. It can also be used for dispersion and milling.

### ZIRCONIA POWDER

Zirconia Powder is a chemically inert material, resistant to high temperature, thermal shock, corrosion, impact, and wear.

### ZIRCONIA BEAD

Zirconia bead is Yttria Stabilized Zirconia grinding media which finds wide application in high speed vertical & horizontal mills.



## APPLICATION

### ZIRCONIA POWDER

Used in MLCC, piezoelectric ceramics, structural or biological ceramics, functional ceramics refractory material, electronic component, optical communication ceramics, artificial gem, color glaze, watch or jewelry, grinding media, oxygen sensor and solid fuel cell, 3D printing, etc.

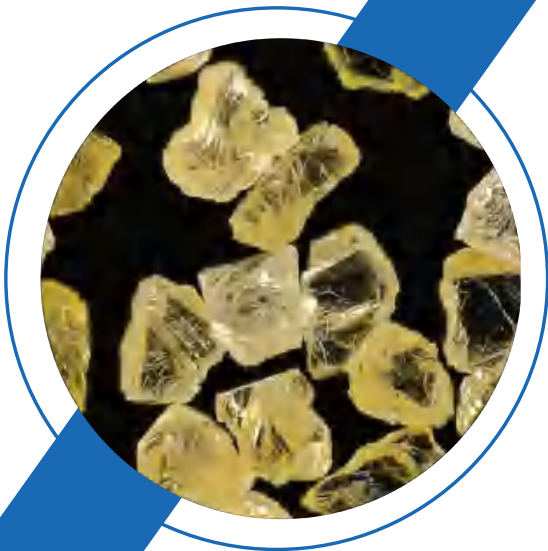
### ZIRCONIA BEAD

They are commonly used as grinding media in various milling and dispersion processes. Zirconia beads are used in industries such as pharmaceuticals, cosmetics, and food processing.

### ZIRCONIUM SILICATE BEAD

Zirconium silicate bead is suitable for surface treatment of workpieces with complex metal and plastic structures to improve the fatigue life of the workpiece surface and remove burrs and flash.





DIAMOND POWDER

Diamond micro powder is a super-hard grinding and polishing material produced by selecting high-quality single crystal artificial diamond as raw material and going through processes such as crushing, shaping, purification, classification, and post-finishing treatment.

It has high hardness, strength, toughness, thermal conductivity and thermal stability, impact resistance, etc.

APPLICATION

- As an ultra-precision polishing and grinding material, used for ultra-precision polishing of magnetic heads, hard disks, gemstones, hard glass, ceramics and carbide.
- Coating of metal molds, tools, components, etc. It can improve wear resistance, surface hardness, and extend service life.
- Used as an additive to lubricants or engine oils, it can greatly improve the operating performance of industrial machinery and vehicles, reduce failures, and extend service life.
- Rubber or plastic reinforcement and heat dissipation agent.



Particle Distribution(μm)					
Particle Size	Size Range	D5	D50	D95	MAX
M0/0.25	0-0.25	0.0	0.125±0.025	0.25	0.75
M0/0.5	0-0.5	0.0	0.25±0.05	0.5	1.50
M0/1	0-1	0.0	0.50±0.10	1.0	3.0
M0.5/1	0.5-1	0.5	0.75±0.15	1.0	3.0
M1/2	1-2	1.0	1.50±0.22	2.0	6.0
M2/4	2-4	2.0	3.0±0.3	4.0	9.0
M3/6	3-6	3.0	4.5±0.45	6.0	12.0
M4/8	4-8	4.0	6.0±0.6	8.0	15.0
M5/10	5-10	5.0	7.5±0.75	10.0	18.0
M6/12	6-12	6.0	9.0±0.9	12.0	20.0
M8/16	8-16	8.0	12.0±1.2	16.0	24.0
M10/20	10-20	10.0	15.0±1.5	20.0	26.0
M15/25	15-25	15.0	20.0±2.0	25.0	34.0
M20/30	20-30	20.0	25.0±2.5	30.0	40.0
M25/35	25-35	25.0	30.0±3.0	35.0	48.0
M30/40	30-40	30.0	35.0±3.5	40.0	52.0
M35/55	35-55	35.0	45.0±4.5	55.0	71.0
M40/60	40-60	40.0	50.0±5.0	60.0	78.0
M50/70	50-70	50.0	60.0±6.0	70.0	90.0

MONOCRYSTALLINE  
DIAMOND POWDER

Monocrystalline Diamond Powder is produced from artificial diamond single crystal abrasive grains by static pressure method, which are crushed and shaped using a special process for super-hard materials.

POLYCRYSTALLINE  
DIAMOND POWDER

Polycrystalline diamond powder is micron and sub-micron polycrystalline particle composed of diamond grains with a diameter of 5~10nm bonded through unsaturated bonds.

NANO DIAMOND  
POWDER

Detonation nano diamonds (DND) are made of carbon dissociated from explosives detonated under high temperature and pressure. They are spherical in shape without sharp edges and corners.



OTHER PRODUCTS



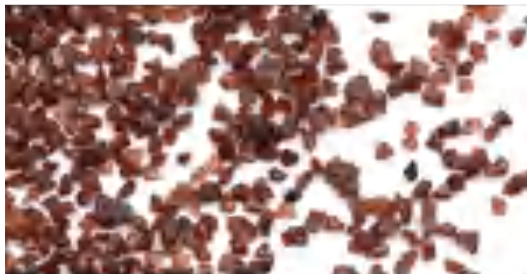
Walnut Shell



Corn Cob



Glass Beads



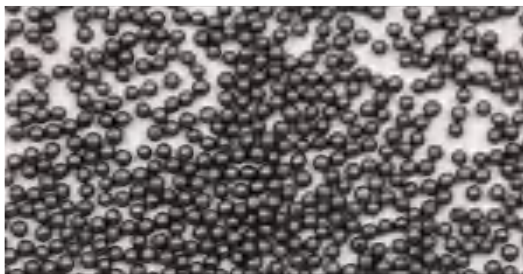
Garnet Sand



White Cerium Oxide



Red Cerium Oxide



Steel Shot



Steel Grit

SANDBLASTING POLISHING-GRAIN SIZE DISTRIBUTION

Grain Size	Coarsest Grain			Coarse Grain			Basic Grain			Mixed Grain			Fine Grain		
	Aperture Size		Screen Overflow	Aperture Size		Screen Overflow	Aperture Size		Screen Overflow	Aperture Size		Screen Overflow	Aperture Size		Screen Overflow
	mm	µm	%	mm	µm	%	mm	µm	%	mm	µm	%	mm	µm	%
16	2.36	—	0	1.40	—	≤25	1.18	—	≥35	1.18 1.00	—	≥70	—	710	≤5
20	2.00	—	0	1.18	—	≤25	1.00	—	≥35	1.00	850	≥70	—	600	≤5
24	1.40	—	0	1.00	—	≤25	—	850	≥35	—	850 710	≥60	—	425	≤5
30	1.18	—	0	—	850	≤30	—	600	≥45	—	600 500	≥60	—	355	≤5
36	1.00	—	0	—	710	≤15	—	500	≥50	—	500 425	≥80	—	300	≤5
46	—	710	0	—	425	≤30	—	355	≥30	—	355 300	≥55	—	212	≤5
54	—	600	0	—	355	≤35	—	300	≥25	—	300 250	≥60	—	180	≤5
60	—	500	0	—	300	≤35	—	250	≥35	—	250 212	≥60	—	150	≤5
70	—	425	0	—	250	≤25	—	212	≥35	—	212 180	≥65	—	125	≤5
80	—	355	0	—	212	≤35	—	180	≥30	—	180 150	≥60	—	106	≤5
90	—	300	0	—	180	≤25	—	150	≥35	—	150 125	≥60	—	90	≤5
100	—	250	0	—	150	≤25	—	125	≥30	—	125 106	≥55	—	63	≤5
120	—	212	0	—	125	≤25	—	106	≥20	—	10 690	≥50	—	53	≤5
150	—	180	0	—	106	≤25	—	9 075	≥30	—	907 563	≥60	—	45	≤5
180	—	180	0	—	90	≤20	—	7 563	≥30	—	756 353	≥60	—	—	—
220	—	150	0	—	75	≤15	—	6 353	≥30	—	635 345	≥50	—	—	—